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New Eastern & Western Regional Directors

January 2006

In November 2005, **Dr. Richard Dunkle** announced the selection of **Vic Harabin** as the Director for the Eastern Region and **Phil Garcia** as Director of the Western Region. Vic and Phil's USDA careers have gone through strong and secure steps to bring them to where they are today.

In 1979, Phil Garcia began his career with APHIS/PPQ in San Juan, Puerto Rico as a PPQ Officer. He moved to Texas in 1983, where he participated in and managed a variety of PPQ pest exclusion, pest management, and emergency programs. In 2000, Phil was selected as an Assistant Regional Director for PPQ's Western Region.

In 1978, Vic Harabin's USDA career began with the Agricultural Marketing Service's Federal Grain Inspection Service in New Orleans, Louisiana. In 1980, he was selected as a PPQ Officer in New Orleans. Vic then moved to Maryland to work for the Professional Development Center rewriting field manuals and later transferred to head up the Permit Unit. In 1995, Vic was selected as the State Plant Health Director for North Carolina, and in 1998, he was selected as Assistant Regional Director for PPQ's Eastern Region.

Each brings an abundance of unique talent and experience to their positions and PPQ. Vic and Phil provide insight into their new leadership, vision and project prioritization.

What are your hopes and vision for the future of the Regions and the Agency?

Vic Harabin: Two items come to mind — 1. That we can effectively keep risk to agriculture offshore. An example is the implementation of best management practices with geranium nurseries in Guatemala re: Ralstonia, but for the most part it's still at the conceptual level. 2. Improve our pest detection efforts so that we can find new pest introductions before they become established, and we have a good chance for eradication. When I look at some of the introductions we've detected (e.g. Emerald Ash Borer, Citrus Greening), we're taking years to detect. I think we've got to do better.

Phil Garcia: The Western Region's vision is to ensure our plant inspection station staff is equipped with the knowledge, skills and tools to address the ever increasing challenges and risk issues associated with the importation of propagative plant material into the United States.

What are the biggest issues in your region?

Vic Harabin: Our biggest issues are related to our current eradication programs (Asian Long horned Beetle, Citrus Canker, Emerald Ash Borer)...funding wise they surpass our regular annual appropriation and we employ several hundred people just in the Citrus Canker project. These projects are not only big for our region but have a high priority in the Agency and the Department, not to mention the impact on the public and industries.

Phil Garcia: PPQ's Western Region recently completed its 2006 Operational Plan. This plan builds from the USDA, APHIS and PPQ strategic plans and presents six major areas of focus for the year. PPQ Western Region (in partnership with the Eastern Region) will focus on the following:

·Preparing and responding to emergencies

·Improving our exclusion activities at port of entry inspection stations

·Discovering exotic pests as early as possible to ensure effective mitigation

·Enhancing pest management activities

·Strengthening our export certification program

(continued on the next page)

·Maximizing the effectiveness of our resources

What other projects or issues have priority?

Vic Harabin: A. Pest detection—we need to collaborate with others to improve our effectiveness. I think we're underutilizing the internet as a public information/ education tool. Pink hibiscus mealybug was first detected in the U.S. by a fireman in Broward Co, FL who learned about it through the internet. B. Continue our efforts with Customs and Border Protection (CBP) to provide analysis and information on risk. We have just started our relationship by establishing port risk committees, and need to ensure we are providing technical assistance to CBP for exclusion of pests. C. Expand export opportunities for agriculture producers in the Eastern U.S.

Phil Garcia: Our emergency management programs continue to grow as we respond to new types of outbreaks, establish new protocols for emergency management and respond to all-hazards emergencies under the National Incident Management System. We celebrated the opening of a new state-of-the-art inspection station facility in Seattle, Washington in December 2005. We will continue to review our inspection station facilities around the country in the years to come. We continue to work closely with our CPHST and Riverdale colleagues to develop better preparedness, detection, response and recovery strategies in our plant health programs.

Technological advances, such as better diagnostic procedures, new survey and detection methodologies, improved data management systems, GIS, etc., provide us with great opportunities to better manage our plant health programs. CPHST must help ensure managers in today's PPQ to keep abreast of these new technologies and help incorporate them into their work place.

Phil Garcia, Western Region Director

What are the challenges you have encountered and how are they overcome?

Vic Harabin: Right now, one challenge is to keep the Florida citrus industry alive. It's no longer just one disease, but a whole host of disease and pest problems which climate and environment seem to be working against us. Problems of this magnitude aren't simply solved by the regulatory action; we have engaged the research community and the citrus industry to help us solve these problems.

Vic Harabin, Eastern Region Director

Phil Garcia: This year we will place a special emphasis on strengthening our export certification program. As international trade increases, increasing attention is focused on PPQ's role in addressing sanitary and phytosanitary issues. Regulations and procedures to facilitate the movement of agricultural products seem to change on a daily basis and our actions at the ground level can easily have international repercussions. I am committed to ensure we have the tools, training and staff necessary to maintain a quality export certification program which will facilitate trade and prevent unnecessary delays or obstacles.

What are the advantages you can foresee stepping into these new positions together?

Vic Harabin: Both Phil and I enter these positions with a wealth of field experience and a desire to do the best for protecting agriculture and the environment. I understand that there have been different approaches taken between the regions, but starting out with a clean slate—we're committed to working together. Recently the Eastern and Western regions jointly developed Regional Operational/Strategic goals and have agreement on one set for both regions. I think that's a great start.

Phil Garcia: We are committed to working closely with each other to ensure consistent administration of field programs. We both bring new perspectives to the Executive Team, and are committed to building strong regional and state teams, all of whom work closely with CPHST and Riverdale staff specialists.

How can CPHST serve you best?

Vic Harabin: By being aware of needs and listening to what problems the programs are encountering. I'm the first to admit that the challenges we face today are unique, difficult and some of the ways we have done business need to be changed. I want our programs to be based on the best available science and technology, so there's no hesitation on my part to fully engage CPHST. I feel that I already have a good working relationship and have respect for the scientists in CPHST. I look forward to greater collaboration with our recent co-location of offices.

Phil Garcia: Provide scientific support for our programs. Validate traditional processes we have in place in our domestic and emergency programs and at the port of entry inspection stations. Equip our staff with the best technology and strategy for our pest inspection, detection, and control and eradication programs.

Submitted by Vic Harabin & Phil Garcia

CPHST and the Plant Inspection Station System

January 2006

Plant inspection stations are a critical component in the country's first line of defense against foreign pests and diseases. In addition to their role in inspecting imported plants and seeds, however, they also play a key role in the export process by certifying that U.S. plant products meet all relevant international and country-of-import phytosanitary standards. In conjunction with these functions, the plant inspection stations enforce all rules and regulations pertaining to trade in plant species protected by the Endangered Species Act (ESA) and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). There are 17 plant inspection stations in all. Sixteen handle most of the commercial and non-commercial plant and seed shipments imported into the United States. One—in Beltsville, Maryland—handles import and export inspections of high risk, high value, plant germplasm that is used for plant breeding and experimental purposes.

Although over 2500 PPQ officers were transferred to Customs and Border Protection (CBP) after the creation of the Department of Homeland Security, the plant inspection stations were retained as part of PPQ. Moreover, the basic functions performed by these facilities have remained largely unchanged, although previous responsibilities, such as reviewing manifests and holding plant shipments, are now performed by CBP. Coordination with CBP at the local level is thus essential to ensure that cargo is held for inspection, transferred to the plant inspection station and handled appropriately after inspection.

Plant inspection stations are currently facing various resource and technical challenges. As the number of plant imports continues to climb, there are increased demands on facility design, equipment and personnel. However, ongoing work conducted by the agency to renovate, standardize and construct new facilities will increase the capabilities of these stations, and future integration of PPQ's databases should improve data entry time. Progress on technical issues, including the development of alternatives to methyl bromide and the expansion in molecular diagnostic techniques available to the plant inspection station system, will further enable these facilities to fulfill their roles.

The relationship between the plant inspection stations and CPHST has been very beneficial, particularly in matters involving commodity treatment. The Treatment Quality Assurance Unit (TQAU), for example, has been instrumental in providing recommendations for treating pest/host combinations not specifically addressed by the PPQ Treatment Manual. Through this cooperation, trade has been enhanced without reduction in the standards critical to the PPQ safeguarding mission.

Support and technology on pest identification have also been provided by CPHST. The Identification Technology Program (ITP) is developing electronic identification tools, including various keys for scale species, mites, and cut flower exports from Africa. The ITP/plant inspection station relationship has evolved into a collaborative venture in some cases, as in the ongoing development of a Lucid whitefly key.

New technologies for accurate and fast detection of plant pathogens can greatly benefit the plant inspection station system. In response, the Molecular Diagnostics and Biotechnology Program is analyzing the potential of emerging technologies, including the immunological assay Anzenbio PDS-8 detection system and CANARY (Cellular Analysis and Notification of Antigen Risks and Yields), for use in environments such as the plant inspection stations. Furthermore, to ensure correct implementation of these techniques, CPHST will train personnel in the proper procedures to be followed.

Future research needs of the plant inspection station system include development of additional molecular techniques, effective alternative quarantine treatments for pests and diseases and application of real-time x-ray technology for the inspection of seeds and woody plants.

Submitted by Bud Petitdemange, Nichole Levang-Brilz, & Larry Zettler

Inspection of bromeliads at the Miami plant inspection station.

Personnel at work in the Houston plant inspection station.
Image Courtesy of Eric McDonald

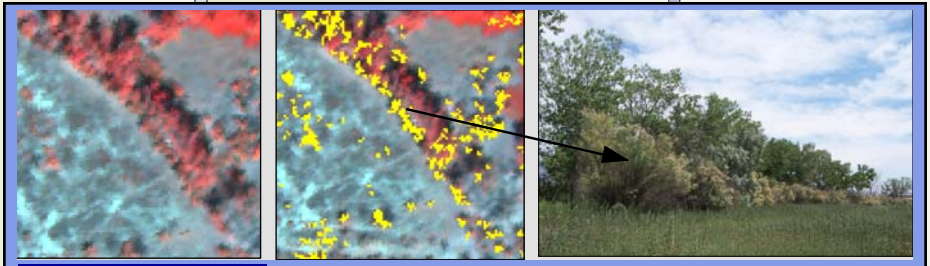
Multiple Labs Address Saltcedar Biocontrol Needs

January 2006

Saltcedar (*Tamarix* spp.) is a weed that currently causes negative impacts on several million acres of prime riparian land used for recreation, livestock production and wildlife habitat in western states, and continues to expand its range. Efforts to control Saltcedar have included a variety of chemical, mechanical and cultural techniques that although effective are expensive and temporary. CPHST scientists have participated in a consortium of workers from a variety of federal, state and local agencies led by ARS to promote the release of insect natural enemies to establish biological control of Saltcedar. CPHST has assisted by testing methods for tracking population expansion, examining potential impact of successful Saltcedar control on insect production in affected areas and pursuing increased releases in northern states.

Efforts to release biocontrol agents in some of the most heavily impacted areas in AZ and CA have been hampered by concern over an endangered species of insectivorous bird called the Southwestern Willow Flycatcher (SWWF) (*Empidonax traillii extimus*). As Saltcedar has out-competed native vegetation in riparian areas (where SWWF nests), the bird has shifted its nesting substrate from willow to Saltcedar at some locations. There is controversy on the potential effects of Saltcedar control on SWWF populations: biocontrol has been an especially contentious issue due to its expected long term impact. A comparison conducted along the Lower Colorado River shows that insect production at sites dominated by a variety of native plant types, including Mesquite, Willow, and Cottonwood exceeds insect production at Saltcedar dominated sites, indicating the forage base for insectivores will be minimally affected by Saltcedar control, and should increase as native plants replace Saltcedar. Experimental releases of *Diorhabda elongate*, a natural enemy that exhibits a large degree of impact on Saltcedar in its native range, were made in 7 states by other federal and state agencies and university personnel to evaluate its potential in controlling Saltcedar in the U.S. As populations of this insect became established there was a need to track dispersal. *D. elongata* aggregation pheromone and plant volatiles associated with Saltcedar were isolated, identified and synthesized by ARS scientists in Peoria, IL. **Earl Andress** with DSPMSL in Brawley, CA tested this pheromone and the plant volatiles separately and in combination along with various trap types near Lovelock, NV in areas where the biocontrol agent was known to be established. A yellow sticky trap baited with both pheromones and host plant volatiles captured higher numbers of *D. elongata* in areas with moderate populations than other trap/lure combinations. This trap was also successful in capturing individuals in locations where no *D. elongata* were detected with visual surveys and at least 3 km from any Saltcedar, and has clearly proven to be the most effective tool for detecting this insect at low population levels.

A trap survey conducted in July and August 2004 at the release site in Lovelock recovered *D. elongata* 77 km northeast and 47 km southeast of the initial release point. An abbreviated survey conducted in 2005 revealed *D. elongata* 68 km east of the most southeastern point recorded in August of 2004 and 53 km west of the most southwestern point recorded in August of 2004.



Lovell, WY hyperspectral data subset (vegetation appears in red).

Lovell, WY classified saltcedar in yellow.

Lovell, WY saltcedar understory.

Lisa Kennaway, a scientist with the CPHST Surveillance Technology Unit based in Fort Collins, is evaluating several remote sensing approaches to mapping and monitoring the distribution of Saltcedar (*Tamarix* spp.). The study currently focuses on a biocontrol release site in Lovell, WY, using hyperspectral image data for the years 2002-2004 and Erdas Imagine and Feature Analyst software. Early results are promising, with the 2003 data near completion.

Future project plans include expansion to other biocontrol release, as well as a complementary evaluation using multispectral image data. Within PPQ, it is rare that a biocontrol initiative has this type of data available for program planning and management. Developing a consecutive year dataset contributes to the ultimate goal of having a Saltcedar distribution data series that program managers will use to evaluate the performance of the biocontrol treatment.

The first 'implementation' releases of *D. elongata* in the U.S. were made in early August 2005, after the Fish & Wildlife Service concurrence for the release project was received and a PPQ release permit issued in late July. A total of about 69,000 *D. elongata* adults were distributed among 25 insectary sites north

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of 38º latitude in 7 western states (CO, ID, KS, MT, OR, SD, and WY). This strain of *D. elongata*, adapted for survival in northern latitudes and not southern latitudes, was selected specifically to be distributed among 25 insectary sites north of 38º latitude in 7 western states (CO, ID, KS, MT, OR, SD, and WY). The strain of *D. elongata*, adapted for survival in northern latitudes and not southern latitudes, was selected specifically to avoid impact on SWWF habitat. Released beetles were collected at an established research site in NV by NWML and Colorado Dept. of Agriculture. A pre- and post-release monitoring effort will be conducted at each site to assess beetle populations and document their impacts on the target weed and associated vegetation. Monitoring protocols were developed by **Rich Hansen**, a NWML scientist. These releases will serve as insectary sites; once established, beetles will be collected for distribution throughout Saltcedar-infested areas in each state. In 2006, implementation releases will be initiated in several new states, and selected 2005 insectary sites may be augmented with additional beetles. The *D. elongata* implementation release program is a cooperative PPQ effort involving NWML, Western Region and SPHDs in the seven states; additional cooperators from universities, other federal agencies, state agencies, and local weed management are also involved.

Submitted by Earl Andress, Rich Hansen & Lisa Kennaway

PPQ Eastern Region and CPHST Participate in NAPPO Annual Meeting

January 2006

The North American Plant Protection Organization (NAPPO) is a Regional Plant Protection Organization that includes Canada, the United States and Mexico. NAPPO coordinates the efforts of the three countries to protect their plant resources from entry, establishment and spread of regulated plant pests, while facilitating intra/ interregional trade. Representatives within NAPPO include state and federal government employees and spokespersons from industry groups from each country. Several CPHST scientists contribute to NAPPO by serving on panels such as the Fruit Tree Panel Technical Advisory Group, the Pest Risk Assessment (PRA) Panel and the Phytosanitary Alert System (PAS) Panel.

Solid wood packing material marked according to ISPM No. 15 requirements.

The NAPPO Annual meeting took place this year in Puerto Vallarta, Mexico from October 17-21. Several staff from the PPQ Eastern Region (PPQ ER) and CPHST-Plant Epidemiology & Risk Analysis Lab (PERAL) participated in the meeting, including **Laney Campbell**, **Patricia Claves**, **Vic Harabin**, **Calvin Schuler**, **Gary Cave**, **Christina Devorshak**, **Gordon Gordh**, **Heather Hartzog**, **Christie Hurt**, **Scott Redlin** and **Marina Zlotina**.

Heather Hartzog, the Chair of the Phytosanitary Alert System (PAS), led the PAS Panel's discussions regarding the many changes underway for the PAS website (www.pestalert.org) , such as a new posting format, updated look, as well as additional search and outreach features. **Christie Hurt** and **Heather Hartzog** are working with the North Carolina State University's Center for Integrated Pest Management programmers to develop the website changes. A new version of the website is scheduled for release by January 1, 2006. **Gary Cave** updated the NAPPO PRA Panel on the work done by Canada and the U.S. on *Phytophthora ramorum*. Discussions also included review of last year's assignments and updates from each country. The Citrus Panel discussed recent developments in citrus programs and countries' responses to these new developments. The PPQ ER (**Calvin Schuler**, **Laney Campbell**, **Patricia Claves**, and **Vic Harabin**) engaged in discussions with Canadian colleagues on key program issues, such as the U.S. and Canada's procedures for implementation of ISPM No. 15 for regulation of solid wood packing material, procedures for certification of nursery stock, the development of quality manuals for industry and the use of certification labels. PPQ ER also worked with Mexican colleagues on the export of Christmas trees from Virginia and North Carolina to Mexico. **Heather Hartzog** presented the current PAS website features, usage, and advertised the upcoming changes in the "Slowing the Spread of Plant Pests" symposium. Since the PAS website has been online, the overall usage has steadily increased over the past five years, especially the Spanish version of the website (www.pestalert.org/espanol). **Christina Devorshak** presented a talk during the symposium entitled "NAPPO Assessment of Greatest Threats", detailing the work of the New Pest Advisory Group (NPAG) and how NPAG works with other parts of PPQ in safeguarding agricultural and environmental resources.

Submitted by Christie Hurt

zNose Reveals Pests at Ports of Entry

January 2006

Increased international trade has severely compromised U.S. agricultural because of the propensity of foreign products to transport invasive species into the country. At the ports of entry, inspectors of propagated plant material are often faced with the daunting task of finding a visual sign of a pest or disease hidden among the millions of plant materials passing through inspection stations daily. In addition, many items such as bonsai trees, seeds and Dracaena canes can conceal invasive pests making these commodities particularly difficult to inspect. Clearly, high-throughput screening methods to detect invasive pests concealed in propagated material are needed to bar exotic pests from entering into the U.S. Recent advances in portable mass spectrometry technology may provide a feasible means to detect plants attacked by exotic pests by their unique volatile signature. Agricultural products are known to produce a diagnostic set of characteristic compounds. Similarly, research has shown that plants attacked by insects produce a volatile bouquet different than when plants are damaged mechanically. In a collaborative effort, CPHST Miami, ARS Subtropical Research Station, Miami, FL scientists and Miami Inspection Station (MIS), Miami, FL staff are applying these basic concepts to recent advances in portable mass spectrometry technology.

ARS Subtropical Research Station chemists Elena Schnell (left) and Robert Heath (right) and CPHST entomologist Amy Roda (middle)

Late last year Eastern Region AQI supported (34K) purchase of a zNose portable ultra-fast gas chromatograph. Shrewd SHRS ARS scientists Robert Heath and Elena Schell critically compared the sensitivity of the zNose to detect volatiles to state-of-the-art non-portable automated systems found in their laboratory. To their pleasant surprise, they found the zNose not only provided a comparable detection limit (pico grams) but they also found the machine fast (taking only 10 sec to run a sample) and very user friendly to a level that non-chemists would not have trouble running the machine. The group is now focusing to select a model system where volatile signature on non-infested plant material will be compared with infested plant material.

The group will select from a list of most difficult to detect pests provided by MIS. The combined expertise in the partnership between CHPST, ARS and MIS will provide a basic systems approach with immediate application of the critically needed technology to protect American agriculture. Enhancing our ability to detect and prevent the establishment of exotic invasive species could save billions of dollars of lost agricultural revenue as well as costs associated with eradication efforts.

1/1,000,000,000,000 = 1e-12
Picogram-One Trillionth of a gram

Submitted by Amy Roda

Administrative Office Tidbits

January 2006

APHIS ADOPTS NEW FOUR-LEVEL PERFORMANCE APPRAISAL PROGRAM

Beginning in July 2006, APHIS will begin a new four-level performance appraisal program that will take the place of the current pass/fail program. In 2006, everyone will receive two different performance evaluation styles. Through January to June, the current pass/fail system will be used. For the months of July through December, you will be rated on the new four-level program. Your supervisor will be working with you at some point during the first six months of 2006 to develop three to six new rating elements to be used with the new four-level appraisal program. The elements differ from the old system in three ways: 1) all elements must relate to critical elements or the employee's work assignments and responsibilities; 2) elements will be weighted; and 3) each element will be rated at one of three levels - fully successful, exceptional, or unacceptable.

In the new system each of the elements will be scored, multiplied by the assigned weight and added together to produce a score that will provide the rating of record. This score will equate to one of four-levels of performance: Exceptional, Exceeds Fully Successful, Fully Successful, or Unacceptable. If you receive an unacceptable rating on any element (regardless of the weighting) you will receive an unacceptable performance evaluation.

I know...it sounds complicated, but in fact it is very simple and straightforward. The key to the success of this performance appraisal system is the same as with any other system...communication between the employee and the supervisor. So when you are asked to participate in the development of elements, don't hesitate to speak your mind and ask questions about anything you do not understand. Your participation is a key element to the success of the program.

Submitted by Dean Denham

Look Who Is Retiring!

Bob Jones
January 2006

Dr. Bob Jones will retire from a long and distinguished career primarily with the Methods Development/CPHST unit within USDA, APHIS on January 3, 2006. Dr. Jones received a B.A. in Biology with minors in English and Philosophy/ Theology in 1963 from St. Michael's College in Santa Fe, New Mexico. He went on to earn an M.S. and Ph.D. in Entomology from Utah State University and the University of Idaho, respectively. As a graduate student, he researched the artificial rearing of bark beetles, population and ecology studies of Douglas-fir, cone and seed insects, and gall-forming insects and their inquilines on sagebrush. He worked seasonally on insect survey and control with the US Forest Service on one of the last Spruce Budworm Control Programs with DDT and with APHIS, PPQ on rangeland grasshopper and crop pests. In 1974 he started full time with USDA APHIS on Mexican Border Inspection. In 1978, he became a Supervisory PPQ Officer with the Boll Weevil Eradication Trial, providing Methods Development Support for the Boll Weevil Programs beginning in 1980. His research has included numerous projects on chemical and biological insecticides, insect and plant growth regulators, biological and natural control, morphological studies for forensic analysis of boll weevil specimens and spray equipment use and evaluation. He has organized and run several large scale control programs both for research and non-research projects, and has found the development and operation of a biological control program for the cotton bollworm (after boll weevil eradication) in cooperation with 100+ cotton farmers in northeastern North Carolina to be one of his most rewarding professional experiences. Dr. Jones began work in support of Imported Fire Ant Projects in 2001. During this time, Dr. Jones has been the lead scientist in the development of a standardized bait attractant to be used in IFA survey.

Submitted by Bob Jones

Bob Staten
January 2006

As the son of a cotton breeder, Bob Staten was raised with American agriculture. He was born and raised in Las Cruses, New Mexico where he began his career working for a commercial chemical agriculture company. He attended the University of California at Riverside where he earned his Masters and Ph.D. degrees in Entomology. In 1970, he was hired to prove sterile insect techniques (SIT) at a lab in Indio, CA. Six months later, the lab moved him to Phoenix, AZ to work with Plant Protection Division (PPD). PPD was part of ARS and later morphed into APHIS. Bob has spent his 35 year USDA career in Phoenix changing with the Agency as reorganization occurred. His career encompasses many accomplishments. He was instrumental in promoting the eradication of pink bollworm in the West. He worked on pink bollworm pheromone development and improvement and created an inexpensive delivery system to allow it to be feasible for wide scale use. He developed the pink bollworm pheromone confusion technique used with BT cotton and SIT. Administratively, Bob managed and structured the CPHST Decision Support & Pest Management System Lab (DSPMSL) in Phoenix.

Bob watched PPQ grow, shrink, and change. The biggest change Bob has seen within the Agency is the information technology arena. He believes PPQ needs to embrace the change and continue to find new technology advancements. Technology can help PPQ focus on the real needs of U.S. agriculture by putting a higher percentage of efforts to the remediation of pests. PPQ cannot depend on prevention; therefore, the Agency must have the capability to react and treat invasive species quickly.

Bob leaves CPHST with the advice to simplify procedures and structure. "Science needs more time at the bench and not answering 'will calls' from a large staff." He believes communication should be more at a local level and the staff should not be asked to write papers or reports that people don't read. "Water is good to drink, but if you have too much, you will drown in it."

Bob Staten himself did not publish as much as he should have and regrets not doing so. He advises young scientists to publish their work. "Put your ideas on paper and don't walk out the door with all of your knowledge in your head like I'm doing."

Bob has been married to his wife Sandy for 16 years. He has two sons and step-children, along with many grandchildren. After he retires from the DSPMSL in Phoenix, AZ, he plans on spending time in his garden, fly fishing, building furniture in his woodworking shop and renewing his drawing and painting skills. "One of the biggest challenges I will have in the future is not having a schedule. I have always had a plan and now the plan is wide open."

Submitted by Bob Staten

Look Who Is Retiring!

Doug Harris
January 2006

Doug Harris received undergraduate training in business management at the University of Nebraska (Omaha, NE) and Texas Lutheran College (Seguin, TX). He began a government career in the U. S. Air Force as a Personnel Specialist in June 1961 and was assigned to various duty stations in the United States and foreign countries. He has held numerous personnel/administrative positions including an Executive Office position at Air Staff level where he established administrative policies, budget and personnel procedures. During the period from 1973 until 1986, he served on several Air Staff briefing teams and Air Staff Inspection team, traveling to almost every Air Force installation worldwide. After leaving the Air Force in 1988, he managed a retail business in San Antonio, TX for seven years. He joined APHIS as an Accounting Assistant for the Texas Animal Damage Control Program (now Wildlife Services), located in San Antonio, TX in July 1995. In March of 1998, he was selected to be the first permanent Administrative Support Assistant assigned to the newly reorganized CPHST. In the summer of 2002, he was selected to be the first Administrative Officer for CPHST.

Doug remembers his arrival to Raleigh with a smile, "When I arrived, there were seven scientists in the Raleigh office. They were all crammed into a small conference room in the back of the office area. You had to walk through a 9,000 sq ft vacant office area to get to them. There was no furniture, phones or anything in the office, except in the little conference room. Today, CPHST in Raleigh consists of the Director's Office, the Plant Epidemiology and Risk Analyst Laboratory, the Biological Control Unit and the Treatment Quality Control Unit- around 85 personnel in all. We have come a long way in the past few years.

I have enjoyed working with all the folks in CPHST and those in PPQ and APHIS that I have come into contact with. I will miss seeing and talking with them on a daily basis. My future plans involve a golf course, and other than that, I don't plan to do anything stressful or that involves a time line."

Submitted by Doug Harris

Nick Colletto
January 2006

Nick Colletto, a Marine Corps veteran, joined the USDA in January of 1970 working as an insect production worker in the newly established Pink Bollworm Rearing Facility. During this period he completed his BS in Entomology at Arizona State University graduating in 1976. After working three more years in the facility, Nick had a short, eight year break in service joining his two brothers as an iron worker on diverse projects throughout Arizona, including a 27 story building and the Palo Verde Nuclear Plant. Nick rejoined USDA in 1987 where skills learned in construction have always been welcome and useful to those of us with diverse field projects. In the Phoenix Methods Development Laboratory, Nick was invaluable in supporting the Grasshopper IPM program R & D efforts with Nelson Foster for 4 years. During this time he worked over much of the U.S. rangeland ecosystem including North Dakota, South Dakota and Wyoming. In the ensuing years Nick worked in pink bollworm rearing support with Ernie Miller and in white fly bio control with Juli Gould. During his last years, he worked in pink bollworm pheromone systems development and SIT technology including work with transgenic insects with Bob Staten and Ernie Miller. In this work he has been in the field in Texas, New Mexico and California. Nick has always been a "go to" person for numerous projects and recently has been our Safety Officer. He will now enter a new phase of his life after retirement from the USDA. Nick will again work in the private sector in Environmental Hazard Remediation and Assessment.

Submitted by Nick Colletto

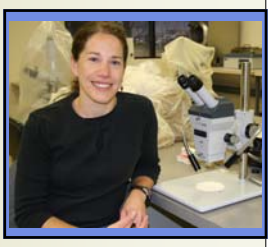
Get to know the new CPHST team members!

CPHST Spotlight: Nehalem Breiter

January 2006

Nehalem Breiter joined CPHST (National Weed Management Laboratory) in Fort Collins as a Biological Science Technician in July 2005.

Nehalem grew up, along with four brothers, in Northeastern Washington State. She received her B.A. in Geography with an emphasis in Resource Management and a minor in Spanish from Huxley College of Environmental Studies, Western Washington University in Bellingham, WA in 2000. In 2005, she completed a Master's degree in Ecology and Evolutionary Biology from the University of Colorado in Boulder. Her thesis research examined the post-release host specificity of *Mecinus janthinus*, a promising biological control insect currently used for management of Dalmatian toadflax. Prior to attending graduate school, Nehalem worked for the National Park Service in Rocky Mountain, Sequoia-Kings Canyon, and Yellowstone National Parks in a variety of fields. This work experience included wildland firefighting, fire effects monitoring, restoration and invasive plant management which has cultivated Nehalem's interest in plant ecology and the study of invasions using a disturbance ecology framework. Nehalem spends her recreational time outdoors biking, running, rock climbing, telemark skiing and hiking with Jake, a chocolate Labrador. She also loves to cook, garden, do yoga and travel.



CPHST Spotlight: Norman Barr

January 2006

Norman Barr grew up in a large family in the city of Philadelphia. It was in Philadelphia that he attended college (earning his B.S. in Biology from Temple University) and met his future wife, Silvia. After enjoying many Philly Cheese Steaks and Soft Pretzels, they moved to State College, PA to attend graduate school at The Pennsylvania State University. During this time he earned two degrees from PSU (an M.S. in Entomology and a Ph.D. in Genetics) and became the proud father of two wonderful children named Corina and Alexander. As a graduate student, Norman worked on the molecular biology, diagnostics, and systematics of fruit flies (Tephritidae) in the genera *Anastrepha* and *Ceratitis*.

After graduating from PSU, Norman and the family traveled southward to North Carolina where he worked as a postdoctoral researcher at North Carolina State University on the molecular systematics of true flies (Diptera). Recently Norman made yet another push southward (this time to Texas) to work as a molecular biologist with the PDDML, CPHST group on the molecular diagnostics of invertebrate pests. When he is not writing work plans, running gels, or editing DNA sequences, Norman likes to spend time with his family. Popular things to do include taking strolls, reading, music (playing & listening), baking, and good ol' fashion resting (with feet elevated whenever possible).

CPHST Spotlight: Hugh Conway

January 2006

Hugh Conway grew up on a small farm in northeast Iowa with eight brothers and three sisters. After completing high school, he spent eight years in the United States Navy as an Operations Specialist traveling around the world in ships as small as patrol gun boats all the way up to the gigantic Battleship Iowa. After leaving the Navy, he completed a B.S. in Biology from Iowa State University in Ames, Iowa and taught science (Chemistry, Physics, and Biology) for ten years in a small high school in northeast Iowa. While completing his M.S. at Southeast Missouri State University in Cape Girardeau, Missouri, his thesis work was on site selection for placement of mosquito traps with special interest on *Culex pipiens*. He completed a Ph.D. from the University of Arkansas in Fayetteville, AR working on a dissertation project on treatment threshold for the cotton aphid, *Aphis gossypii*. This project included working with biological control agents (coccinelids and *Neozygites fresenii*) that could be included in the treatment threshold decisions. For two years, he was the Director of the Hemlock Woolly Adelgid Mass Rearing Facility at Clemson University in Clemson, South Carolina where improvements in rearing methods doubled production of the biological control agent *Sasajiscymnus tsugae*. During his leadership, the mass rearing of a second biological control agent *Laricobius nigrinus* was started at the Clemson Insectary. Now an entomologist with the Pest Detection Diagnostic and Management Laboratory, Hugh's responsibilities include SIT support of the Mexican Fruit Fly. He was accompanied to south Texas with his wife Svetlana and his four year old son Christopher. His stepson Victor is a freshman attending the University of Central Arkansas at Conway, Arkansas. The family enjoys outdoor activities and gardening. We are happy to be new members of the USDA community.

CPHST Philosophy: An Open Forum

January 2006

CPHST Philosophy: An Open Forum is the section of the Newsletter dedicated to sharing employees thoughts, questions, concerns, and ideas about CPHST's mission, structure, methods, role, and management. Employees are invited to send comments to Gordon Gordh: gordon.gordh@aphis.usda.gov.

This month, Dr. Richard Dunkle, Deputy Administrator for USDA APHIS' Plant Protection and Quarantine (PPQ), shares his thoughts about CPHST and our role in protecting American agriculture.

When I first decided to accept the offer to become the APHIS Deputy Administrator for PPQ nearly seven years ago, it was mainly because the Agency was interested in developing the science base for PPQ to ensure that all of our programs and decisions would be based on the best science possible. At that time CPHST was just beginning to function as a collective resource to support PPQ programs. Working through the Executive Team and utilizing the Safeguarding Review as a guide, we began the process of evaluating our needs and making the necessary investments in CPHST to strengthen our science prowess. We went through many iterations to redirect resources and seek additional funding from Congress and other sources to invest into CPHST. We placed a high priority on recruiting and attracting the best scientific and technical experts possible into the organization and are continuing to do so.

These efforts are now paying off. Our CPHST folks are contributing to our operational and regulatory programs more than ever before. Many contentious issues have been resolved as a result of CPHST contributions. For example, one of the first big issues that I dealt with as the PPQ Deputy was the detection of potato wart on Prince Edward Island, Canada. This issue rapidly escalated into an international incident. It wasn't until CPHST working with our program folks developed a risk assessment that brought this issue back down to a manageable problem that resulted in a rational solution. The same can be said of when PPQ began to detect live medflies in Spanish clementines. Within one year, CPHST worked with the program to re-evaluate and modify the cold treatment protocol, conduct a new risk assessment that supported a new rule, and develop a modified work plan that ultimately resulted in re-establishing the clementine import program. CPHST scientists have delivered urgently needed new technologies to many programs including ALB, EAB, fruit flies, IFA, phytosanitary sampling and treatment protocols, major advances in pest and disease ID including molecular and biochemical approaches, database development such as the GPDD, risk assessment to support rulemaking, and risk assessments and pathway analyses to improve many and varied PPQ programs, just to name a few.

We have come a long way in such a short period of time. All of you in CPHST are integral to the success of the many programs in PPQ and the overall PPQ mission. Our operational specialists now rely heavily on CPHST to find and adapt the latest technologies and scientific thinking to solve their difficult problems. We are making great strides to link our CPHST methods and science support efforts to operational program performance. We are all in this together; we all are scientists and technical specialists no matter whether you are with CPHST or any other program in PPQ. We all need each other in order to succeed. I'm very proud of the successes you have achieved collectively with your PPQ customers and stakeholders. I'm sure I speak for all of PPQ that we will continue to expect and rely on your creativity and innovation, as well as your energy and sense of mission and teamwork to ensure success.

Dr. Richard Dunkle speaking at the CPSHT Director's Office in Raleigh.

Submitted by Richard Dunkle

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Challenges of Working Abroad

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When I mention my CPHST job takes me to places like Panama, Dominican Republic, Puerto Rico, Barbados, and Guyana, I almost see the images of beaches and relaxation flash across the faces of my friends and colleagues. They do not seem to fathom that the work really takes place in hot, humid, rubbish filled backyards and farms (Fig 1) where I spend dawn to dusk picking up insect infested material (Fig. 2). The off-shore initiative takes me to places visited by very few tourists where my work focuses on developing classical biological control programs for pests, such as the papaya mealybug (*Paracoccus marginatus*) and the West Indian Fruit Fly (*Anastrapha obliqua*). Although the work does not require sophisticated equipment or training, getting the agents into the field often poses challenges that take a little persistence, ingenuity and dedication by country cooperators to overcome. For example, the West Indian Fruit Fly parasitoids shipped from Mexico to the Dominican Republic arrived at 11:30 pm at the wrong facility in Puerto Rico and Costa Rica instead of the Dominican Republic (we suspected a manifest confusion with Santo Domingo "PR" and "CR" versus the similar "DR").

Figure 1: Field sites where papaya mealy bug biocontrol agents are released in Guyana.

Figure 2: Amy Roda searches for papaya mealybugs in Guyana.

Even when the biocontrol agents arrive on time, releasing them in the field often turns into an adventure. In Guyana, many modes of transportation are used, including small boats to cross large rivers (Fig. 3), mopeds and public buses, which makes transport uncomfortable and unpredictable. These excursions result in me looking rather "field worn" by the time I arrive at one of nicest hotels in the city and happen to be introduced to the US Ambassador. I hope that people see a "hard-working" entomologist underneath the sweat and mud. Also, simply getting to a microscope can turn into an exciting activity. On one visit (country and location purposefully omitted), we happened to wander between a group of masked, stone wielding, student demonstrators and riot armored police as we made our way to the lab. The sight, and a few lingering whiffs of tear gas, helped us decide to postpone processing the day's field samples.

Despite these challenges, the work is well worth these little inconveniences. Once established, the biocontrol agents can reduce the pest to very low numbers thereby helping the country's economy by cost reduction for pest control, lower impact on local fruit production and minimal rejections at ports of entry. Moreover, these programs safeguard U.S. agriculture by slowing the spread of the pest into the U.S. as well as allowing the control technology to be perfected. I suspect that my friends and colleagues will continue to tease me about my "work" on palm tree covered beaches, but I know a few stories like these (and a couple pictures) show the challenges and the importance of this work to U.S. agriculture.

Figure 3: Transportation to carry mealybug parasitoids to remote areas.

Submitted by Amy Roda